

REMARKS

The Final Office Action of February 19, 2010, has been received and reviewed. In conjunction with the Request for Continued Examination filed herewith, the claims are to be amended as previously set forth. New claims 31 and 32 are presented herein. Basis for new claims 31 and 32 can be found throughout the Specification and more specifically in at least ¶¶ [0101]-[0105]. All amendments and claim cancellations are made without prejudice or disclaimer. No new matter has been presented. Reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 112, First Paragraph, Written Description

Claims 21-26 and 30 stand rejected under 35 U.S.C. § 112, first paragraph, as assertedly failing to comply with the written description requirement. Applicant notes that the rejections of claims 26 and 30 are moot as those claims are cancelled herein. Applicant traverses the remaining rejections as hereinafter set forth.

Applicant notes that a sequence can meet the written description requirement under *Enzo Biochem, Inc. v. Gen-Probe Inc.* through the showing “relevant identifying characteristics *i.e.* complete or partial structure, other physical and/or chemical properties, functional characteristics when coupled with a known or disclosed correlation between function and structure, or some combination of such characteristics. 296 F.3d 1316, 1324 (Fed. Cir. 2002) (emphasis added). Applicant respectfully notes that added emphasis on “or” which applicant submits clearly indicates that one does not have to meet each and every one of the test outlined by the *Enzo* court, but that any one of them can be met to satisfy the written description requirement.

Applicant submits that there is a strong art recognized correlation between the function of nucleic acid remaining hybridized to nucleotides 89-293 of SEQ ID NO:37 under the stringent conditions outlined in the claims and the structure of such a nucleic acid. As is well known in the art, hybridization of nucleotide sequences generally proceeds through A-T(U) and G-C pairing. As is further well known in the art, the A-T(U) pairing results from two hydrogen bonds and G-C pairing results from three hydrogen bonds. The ΔG for each of these binding pairs is also well known in the art. Thus, there is an art recognized correlation between the strength of the hybridization (the total ΔG) and the structure. Consequently, under the test provided in *Enzo*,

the present claims meet the written description requirement as there is an art recognized correlation between structure and function.

Further, much of the Office's rejection appears based on the assumption that claims are directed to nucleotides that are the complement of a nucleotide sequence encoding a portion of an FBPS of *S. suis*. (see, e.g. page 5, lines 4-7, and page 8, lines 1-2 and 2nd full paragraph of the Final Office Action). Applicant notes that claims 21 has no element directed to *S. suis* origin of the complement of the nucleotide sequence binding SEQ ID NO:37 and that claims 26 and 30 have been cancelled herein.

In the second paragraph of page 5 of the Final Office Action, the Office acknowledges that the specification describes nucleotide sequences of SEQ ID NO:37 and sequences which hybridize to SEQ ID NO:37. The Office then goes on to assert that there is no disclosure of nucleic acid molecules that hybridize to SEQ ID NO:37 wherein the complement of the hybridizing nucleotide sequence encodes from a portion of a FBPS of *S. suis*. As noted *supra*, this element is not present in any of the current claims.

For at least the foregoing reasons, applicant requests the withdrawal of the rejections of claims 21-25 under 35 U.S.C. § 112, first paragraph, for lack of written description

Rejections Under 35 U.S.C. § 112, First Paragraph, New Matter

Claims 21-26 and 30 stand rejected under 35 U.S.C. § 112, first paragraph, as assertedly incorporating new matter. Specifically, it was asserted that the application fails to disclose a contiguous sequence hybridizing to the full length of nucleotides 89-293 of SEQ ID NO:37. Applicant notes that the rejections of claims 26 and 30 are moot as those claims are cancelled herein. Applicant traverses the remaining rejections as hereinafter set forth.

Applicant notes that the identification of a 5kb fragment containing the FBPS gene of *S. suis* serotype 2 is described at ¶ [0105] of the Specification as published. The nucleotide sequence has been submitted to GenBank under Accession no AF438158 (¶ [0102] of the Specification as published). The identified FBPS nucleotide sequence is therefore accessible to any skilled person. Nucleotides 89-293 of SEQ ID NO:37 are identical to part of the sequences of AF438158. Consequently, the present application provides adequate disclosure of a

contiguous sequence hybridizing to the full length of nucleotides 89-263 of SEQ ID NO:37.

For at least the foregoing reasons, applicant requests withdrawal of the rejections of claims 21-25 under 35 U.S.C. § 112, first paragraph, for new matter.

Rejoinder

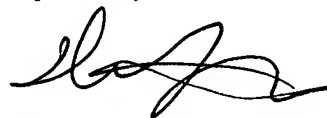
Applicant respectfully requests rejoinder of claims 1, 6, 7, and 9. If an applicant elects claims direct to a product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all elements of the allowable product claim will be rejoined. M.P.E.P. § 821.04; *see also In re Ochiai*, 71 F.3d 1565 (Fed. Cir. 1995); *In re Brouwer*, 77 F.3d 422 (Fed. Cir. 1996). Applicant respectfully submit that a claim directed to a product (claim 21) was previously elected by the applicant. Applicant respectfully submits that claim 21 is in condition for allowance. As such, applicant respectfully requests the rejoinder of claim 1, 6, 7, and 9 which include all the elements of allowable product claim 1.

CONCLUSION

In light of the above amendments and remarks, applicant respectfully request reconsideration of the application. If questions remain after consideration of the foregoing, or if the Office should determine that there are additional issues which might be resolved by a telephone conference, the Office is kindly requested to contact applicant's attorney at the address or telephone number given herein.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Morath', with a stylized flourish at the end.

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